@AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

ATL Applications

INVENTORY SHEET

WORK ORDER # 0910022B

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Completed by:

Kara McKiernan	Kara McKiernan/ Document Control	10/21/09
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0910022B

Work Order Summary

CLIENT:	Mr. Taeko Minegishi Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494	**BILL TO:**	Accounts Payable Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494
PHONE:	800-825-5343	**P.O. #**	16512
FAX:	781-247-4305	**PROJECT #**	16512
DATE RECEIVED:	10/01/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/20/2009		

FRACTION #	NAME	TEST
17A	101792	ATL Applications
17AA	101792 Lab Duplicate	ATL Applications
18A	101793	ATL Applications
18AA	101793 Lab Duplicate	ATL Applications
19A	101794	ATL Applications
20A	101818	ATL Applications
21A	101819	ATL Applications
22A	101820	ATL Applications
23A	101821	ATL Applications
24A	101822	ATL Applications
25A	101823	ATL Applications
26A	101909	ATL Applications
27A	101910	ATL Applications
28A	101911	ATL Applications
29A	101912	ATL Applications
30A	101913	ATL Applications
31A	101914	ATL Applications
32A	Lab Blank	ATL Applications

Continued on next page

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FAX:	781-247-4305	**PROJECT #**	16512
DATE RECEIVED:	10/01/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/20/2009		

FRACTION #	NAME	TEST
32B	Lab Blank	ATL Applications
33A	CCV	ATL Applications

CERTIFIED BY: Linda D. Trumaro

Laboratory Director

DATE: 10/20/09

LABORATORY NARRATIVE
Nitrogen Dioxide by Radiello 166
Environmental Health & Engineering, Inc.
Workorder# 0910022B

Fifteen Radiello 166 (NO2) samples were received on October 01, 2009. The procedure involves extraction of nitrite from reaction of NO2 with triethanolamine. Absorbance of nitrite is then measured at 537 nm using a spectrophotometer. Results are reported in uG and uG/m3.

Sampling rate of 141 mL/min was provided by the manufacturer.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Results were calculated based on 25 deg C without temperature correction. The actual exposure time was used to calculate sample concentrations and reporting limits.

An exposure time of 20160 minutes was used for the QC samples.

All media used for the sampling were supplied by the client. Blank subtraction was not performed on the sample results since the media used for Method Blanks may be from a different lot than the media used for the samples.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

0003

Sample Results and Raw Data

AIR TOXICS LTD.

ATL Application # 61 for RAD 166 (Nitrogen Dioxide)

Spectrophotometer

Field Sample I.D.	Lab Sample I.D.	Collection Date	Analysis Date	Dilution Factor	Reporting. Limit (ug)	Reporting. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
101792	0910022B-17A	9/29/2009	10/6/2009	1.00	0.32	0.22	2.6	1.7
101792 Lab Duplicate	0910022B-17AA	9/29/2009	10/6/2009	1.00	0.32	0.22	2.6	1.7
101793	0910022B-18A	9/29/2009	10/6/2009	1.00	0.32	0.22	1.5	1.0
101793 Lab Duplicate	0910022B-18AA	9/29/2009	10/6/2009	1.00	0.32	0.22	1.5	1.0
101794	0910022B-19A	NA	10/6/2009	1.00	0.32	0.22	ND	ND
101818	0910022B-20A	9/29/2009	10/6/2009	1.00	0.32	0.22	2.8	1.8
101819	0910022B-21A	9/29/2009	10/6/2009	1.00	0.32	0.22	1.7	1.1
101820	0910022B-22A	9/29/2009	10/6/2009	1.00	0.32	0.22	0.66	0.44
101821	0910022B-23A	9/29/2009	10/6/2009	1.00	0.32	0.22	2.1	1.4
101822	0910022B-24A	9/29/2009	10/6/2009	1.00	0.32	0.22	2.0	1.4
101823	0910022B-25A	NA	10/6/2009	1.00	0.32	0.22	ND	ND
101909	0910022B-26A	9/30/2009	10/6/2009	1.00	0.32	0.22	7.5	5.0
101910	0910022B-27A	9/30/2009	10/6/2009	1.00	0.32	0.22	7.6	5.0
101911	0910022B-28A	9/30/2009	10/6/2009	1.00	0.32	0.22	3.1	2.0
101912	0910022B-29A	9/30/2009	10/6/2009	1.00	0.32	0.22	3.6	2.4
101913	0910022B-30A	9/30/2009	10/6/2009	1.00	0.32	0.22	4.4	2.9
101914	0910022B-31A	NA	10/6/2009	1.00	0.32	0.22	ND	ND
Method Blank	0910022B-32A	NA	10/6/2009	1.00	0.32	0.22	ND	ND
Method Blank	0910022B-32B	NA	10/6/2009	1.00	0.32	0.22	ND	ND
							%Rec	
CCV	0910022B-33A	NA	10/6/2009	1.00	0.32	0.22	102	

COMMENTS: 1. NA=Not Applicable
2. ND=Not Detected
3. Exposure time of 20160 minutes was assumed for the QC samples.
4. Background subtraction not performed.

Dioxide Radiello Calculation Worksheet

Workorder #:	0910022B	
Sampling Rate (ng/(ppb*min))	0.141	Typically 0.96 for NO2
Sampling T (deg C)	25	Typically 25
Volume (mL)	5	Typically 5 for NO2
Date of Analysis:	10/6/2009	

1000ng/1ug

(Abs-Y-int)xDF	Conc(ug)x5 (mL)	Conc (ug) x 1000	ppbx mw
Slope	0.5mL	Q x Duration	24.45

Corrected Q 0.141 es into account temp

LabSampleID	Client	Date of Collection	Abs	Duration (min)	DF	Conc (ug) (for 0.5mL Aliquot)	Conc (ug) in full 5 mL of sample	Conc (ppb)	Conc (ug/m3)
17A	101792	9/29/2009	0.077	20160	1.00	0.255336811	2.553368108	0.898	1.690
17AA	101792 Lab Duplicate	9/29/2009	0.078	20160	1.00	0.259949838	2.599498385	0.914	1.721
18A	101793	9/29/2009	0.055	20160	1.00	0.153850201	1.538502014	0.541	1.018
18AA	101793 Lab Duplicate	9/29/2009	0.054	20160	1.00	0.149237174	1.492371737	0.525	0.988
19A	101794	NA	0.013	20160	1.00	-0.039896962	-0.398969618	-0.140	-0.264
20A	101818	9/29/2009	0.082	20160	1.00	0.278401949	2.784019492	0.979	1.843
21A	101819	9/29/2009	0.058	20160	1.00	0.167689285	1.676892845	0.590	1.110
22A	101820	9/29/2009	0.036	20160	1.00	0.066202675	0.662026752	0.233	0.438
23A	101821	9/29/2009	0.067	20160	1.00	0.209206534	2.092065338	0.736	1.385
24A	101822	9/29/2009	0.066	20160	1.00	0.204593506	2.045935061	0.720	1.354
25A	101823	NA	0.017	20160	1.00	-0.021444851	-0.21444851	-0.075	-0.142
26A	101909	9/30/2009	0.185	20160	1.00	0.753543802	7.535438019	2.651	4.987
27A	101910	9/30/2009	0.186	20160	1.00	0.75815683	7.581568296	2.667	5.018
28A	101911	9/30/2009	0.088	20160	1.00	0.306080115	3.060801154	1.077	2.026
29A	101912	9/30/2009	0.100	20160	1.00	0.361436448	3.614364478	1.272	2.392
30A	101913	9/30/2009	0.118	20160	1.00	0.444470946	4.444709463	1.564	2.942
31A	101914	NA	0.010	20160	1.00	-0.053736045	-0.537360449	-0.189	-0.356
					1.00	-0.099866322	-0.998663218	#DIV/0!	#DIV/0!
					1.00	-0.099866322	-0.998663218	#DIV/0!	#DIV/0!
					1.00	-0.099866322	-0.998663218	#DIV/0!	#DIV/0!
					1.00	-0.099866322	-0.998663218	#DIV/0!	#DIV/0!
					1.00	-0.099866322	-0.998663218	#DIV/0!	#DIV/0!
32A	Method Blank	NA	0.010	20160	1.00	-0.053736045	-0.537360449	-0.189	-0.356
32B	Method Blank	NA	0.011	20160	1.00	-0.049123017	-0.491230172	-0.173	-0.325
33A	CCV	NA	0.166	20160	1.00	0.665896276	6.658962757	2.343	4.407

QC Duration	CCV Spike Amt ug per 0.5 mL
20160	0.65

nplate Verified by HH and AW on 9/4/09

1000ng/1ug

Low PointxDF	RL(ug)x5 (mL) 0.5mL	RL (ug) x 1000 Q x Duration	ppbx mw 24.45					Calibration Data	Calibration Date 10/6/2009 Linear Regression			
RL(ug) for 0.5 mL aliquot	RL (ug) in full 5 mL of sample	RL (ppb)	RL (ug/m3)	Result (ug)	Result (ug/m3)	%Rec	ug/ml of NO2	0.5 mL Aliquot of Cal STD ug of NO2	absorbance		
0.033	0.325	0.1	0.215	2.553368108	1.68998464		0	0	0	Slope	0.216777367
0.033	0.325	0.1	0.215	2.599498385	1.72051665		0.065	0.0325	0.017	Y-int	0.021648758
0.033	0.325	0.1	0.215	1.538502014	1.018280429		0.325	0.1625	0.049	R2	0.998634774
0.033	0.325	0.1	0.215	1.492371737	0.98774842		1.3	0.65	0.163		
0.033	0.325	0.1	0.215	ND	ND		6.5	3.25	0.764		
0.033	0.325	0.1	0.215	2.784019492	1.842644688		13	6.5	1.412		
0.033	0.325	0.1	0.215	1.676892845	1.109876458						
0.033	0.325	0.1	0.215	0.662026752	0.438172248						
0.033	0.325	0.1	0.215	2.092065338	1.384664544						
0.033	0.325	0.1	0.215	2.045935061	1.354132535						
0.033	0.325	0.1	0.215	ND	ND						
0.033	0.325	0.1	0.215	7.535438019	4.987441674						
0.033	0.325	0.1	0.215	7.581568296	5.017973683						
0.033	0.325	0.1	0.215	3.060801154	2.025836745						
0.033	0.325	0.1	0.215	3.614364478	2.39222086						
0.033	0.325	0.1	0.215	4.444709463	2.941797032						
0.033	0.325	0.1	0.215	ND	ND						
0.033	0.325	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.033	0.325	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.033	0.325	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.033	0.325	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.033	0.325	#DIV/0!	#DIV/0!	ND	#DIV/0!						
0.033	0.325	0.1	0.215	ND	ND						
0.033	0.325	0.1	0.215	ND	ND	%Rec					
0.033	0.325	0.1	0.215	6.658962757	4.407333492	102					

QC Results and Raw Data

Spectrophotometer Logbook **@Air Toxics Ltd.** **Logbook#: 1875**

Work Order: 09100228 **Date:** 10/6/09 **Method:** Rad 166

Analyst: M. Skidmore **Wavelength:** 537 nm

Standard ID	Concentration	ABS
Level 1 1858-80-E	0.065 mg/mL	0.017
Level 2 -D	0.325 mg/mL	0.049
Level 3 -C	1.3 mg/mL	0.163
Level 4 -B	6.5 mg/mL	0.764
Level 5 -A	13 mg/mL	1.412
ICV 1858-82	1.3 mg/mL	0.173

r = 0.9986
m = 0.2168
b = 0.0216

ICV % Recovery = 107

Fraction	Dilution	ABS	Sample ID	Sample Volume	Comments
17A	1.00	0.077	101792	5.0 mL	
17AA		0.078	101792		
18A		0.055	101793		
18AA		0.054	101793		
19A		0.013	101794		
20A		0.082	101818		
21A		0.058	101819		
22A		0.036	101820		
23A		0.067	101821		
24A		0.066	101822		
25A		0.017	101823		
26A		0.185	101909		
27A		0.186	101910		
28A		0.088	101911		
29A		0.100	101912		
30A		0.118	101913		
31A		0.010	101914		
B1K		0.010	N/A		Lot: 09133
B1C		0.011			
LCS		0.160			
CCV		0.166			
	MJS 10/6/09			MJS 10/7/09	

Procedure:

Signed

10/7/09
Date

0009

Spectrophotometer Standard Preparation Log **@Air Toxies Ltd.** **Log Book #: 1858**

Standard ID: 1858-39
Project: NEDA Solution Rad 166
Analyst: M. Skidmore
Preparation Date: 9/18/09
Expiration Date: ~~until~~ 9/18/09 when solution turns brown

Solvent: DI H_2O
Solvent Lot #: N/A

Procedure/Comments: Dissolve 250 mg of N-(1-Naphthyl)ethylenediamine dihydrochloride, 98% (1476-1105, located ERIA) in 250 mL DI H_2O.

MJS
9/18/09

Page 39 | Signed: 9/18/09 | Date | Reviewed: 9/24/09 | Date

Spectrophotometer Standard Preparation Log **@Air Toxics Ltd.** **Log Book #: 1858**

Standard ID: 1858-79
Project: Sulfanilamide Solution Rad 166
Analyst: M. Skidmore
Preparation Date: 10/6/09
Expiration Date: 10/6/09

Solvent: HCl/H2O
Solvent Lot #: HCl: 49798

Procedure/Comments: Dissolve 5.0 g of Sulfanilamide, 99% (1476-1104) (located in FERIA) in 50 mL of Concentrated HCl and dilute to 500 mL with D.I. H2O.

MJS 10/6/09

Signed 10/6/09 Date

Reviewed 10/7/09 Date

Spectrophotometer Standard Preparation Log **@Air Toxics Ltd.** **Log Book #:** 1858

Standard ID: 1858-80
Project: Calibration Solutions Rad 166
Analyst: M. Skidmore
Preparation Date: 10/6/09
Expiration Date: 10/6/09

Solvent: D.I. H_2O
Solvent Lot #: N/A

Procedure/Comments:

Dissolve 5 mg of Sodium Nitrate, 97% (located in ER2D) in 250 mL of D.I. H_2O to yield 13 µg/mL or 13 mg/L. From this solution, dilute to make:

6.5 µg/mL	1.3 µg/mL	0.325 µg/mL	0.065µg/mL
(315:630)	(130:650)	(150:600)	(100:500)

Each of these uses serial dilution from the previous solution.

To each of these calibration levels, add 5 mL of sulfanilamide solution, cap tightly, stir and wait 5 minutes. Then add 1 mL of NEDA solution, stir and wait 10 minutes. Measure the absorbance at 537 nm.

MJS 10/06/09

MJS 10/6/09

10/6/09 10/7/09

Signed Date Reviewed Date

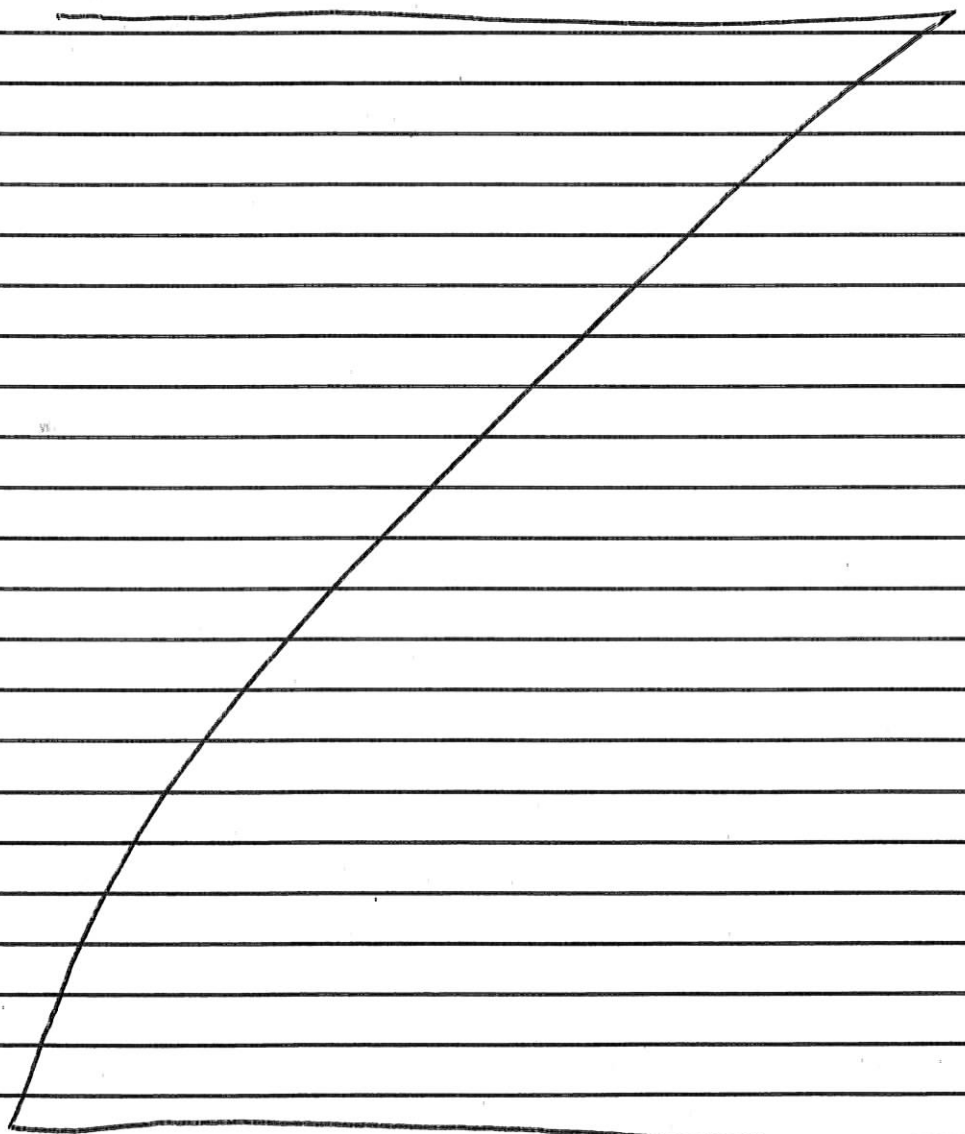
Spectrophotometer Standard Preparation Log **@Air Toxics Ltd.** **Log Book #: 1858**

Standard ID: 1858-82
Project: ICV Rad 166
Analyst: LJ
Preparation Date: 10/6/09
Expiration Date: 10/6/09

Solvent: DI H2O
Solvent Lot #: NA

Procedure/Comments:

Dissolve 5 mg of Sodium Nitrate, 97% (located in ER2D) in 250 mL of D.I. H_2O to yield 13 µg/mL or 13 mg/L. 100 µL of this solution was diluted with D.I. H_2O to a volume of 1.0 mL. 0.5 mL of this solution was added to a cuvette. 5 mL of sulfanilamide solution was added to the cuvette. The solution was parafilmed and stirred and allowed to stand for 5 minutes. 1.0 mL of NEDA solution was then added and was stirred and allowed to sit for 10 minutes. The absorbance was then read at 537 nm. MJ 10/6/09



Signed 10/6/09 Date — Reviewed 10/7/09 Date

Shipping/ Receiving Documents

Air Toxics LTD.
Laboratory Services Since 1989

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY:	Environmental Health & Engineering, Inc.
ATTENTION:	Mr. Taeko Minegishi
FAX #:	781-247-4305
FROM:	Sample Receiving
Workorder #:	0910022B
# of pages (Including Cover):	4

10/21/2009

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Ausha Scott at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 9/30/09

FROM: Environmental Health and Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494-2725

0910022

TO: Air Toxics

Please send invoices to ATTN: Accounts Payable
Please send reports to ATTN: Data Coordinator

In all correspondence regarding this matter, please refer to EH&E Project # 16512

The cost of this analysis will be covered by EH&E Purchase Order # 16512

For EH & E Data Coordinator - URGENT DATA ☒

	SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	Start	OTHER: Time/Date/Vol. Stop
17A	101792	Air/Passive	NO_2 SO_2 HF Analysis	9/15/09	9/29/09
18A	101793				
19A	101794				Ø
20A	101818			9/15/09	9/29/09
21A	101819				
22A	101820				
23A	101821				
24A	101822				
25A	101823				Ø
26A	101909			9/16/09	9/30/09
27A	101910				
28A	101911				
29A	101912				
30A	101913				
31A	101914				Ø

Fed ex 3704 0333 7594

CUSTODY SEAL INTACT? Y ☐ N ☐ NONE TEMP 5.6°C

Special Instructions:

☒ Standard turn around time ☐ Rush by _____ date/time ☐ Other

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES**

☒ Electronic transfer - datacoordinator@eheinc.com

☒ Additional report recipient MFragala@eheinc.com

Each signatory please return one copy of this form to the above address

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 9/30/09

Received by: _____ of (company name) A+I Date: 10/1/09

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Lab Data
Received by: _____ of Environmental Health & Engineering, Inc. Date: _____

WHITE-EH&E FILE COPY YELLOW-LAB COPY PINK-PROJECT MANAGER COPY GOLD-DATA COORDINATOR COPY

Air Toxics LTD.
Laboratory Services Since 1989

SAMPLE RECEIPT SUMMARY

WORKORDER 0910022B

Client

Mr. Taeko Minegishi
Environmental Health &
Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Sales Rep: TL

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 10/12/09 11:59 pm
Date Completed: 10/20/09
Date Received: 10/1/09
PO#: 16512
Project#: 16512

Total $: $ 675.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
17A	101792	ATL Applications	9/29/2009	$40.00
17AA	101792 Lab Duplicate	ATL Applications	9/29/2009	$0.00
18A	101793	ATL Applications	9/29/2009	$40.00
18AA	101793 Lab Duplicate	ATL Applications	9/29/2009	$0.00
19A	101794	ATL Applications	NA	$40.00
20A	101818	ATL Applications	9/29/2009	$40.00
21A	101819	ATL Applications	9/29/2009	$40.00
22A	101820	ATL Applications	9/29/2009	$40.00
23A	101821	ATL Applications	9/29/2009	$40.00
24A	101822	ATL Applications	9/29/2009	$40.00
25A	101823	ATL Applications	NA	$40.00
26A	101909	ATL Applications	9/30/2009	$40.00
27A	101910	ATL Applications	9/30/2009	$40.00
28A	101911	ATL Applications	9/30/2009	$40.00
29A	101912	ATL Applications	9/30/2009	$40.00
30A	101913	ATL Applications	9/30/2009	$40.00
31A	101914	ATL Applications	NA	$40.00
32A	Lab Blank	ATL Applications	NA	$0.00
32B	Lab Blank	ATL Applications	NA	$0.00
33A	CCV	ATL Applications	NA	$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: CPSC Indoor Air Monitoring/13297

BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: Other GC

TERMS:

Reporting Method: ATL Application #61 NO2-Radiello 166

SAMPLE RECEIPT SUMMARY Continued

Client

Phone

Fax

Sales Rep:

Date Promised:
Date Completed:
Date Received:
PO#:
Project#:

Total $: $ 675.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
Misc. Charges	eCVP (15) @ $5.00 each.			$75.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: CPSC Indoor Air Monitoring/13297

BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: Other GC

TERMS:

Reporting Method: ATL Application #61 NO2-Radiello 166

Other Records

Air Toxics LTD.
Laboratory Services Since 1989

Method : ATL Application #61 NO2-Radiello 166

CAS Number	Compound	Rpt. Limit (ug)
10102-44-0	Nitrogen Dioxide	1.0

@Air Toxics Ltd.

DATA REVIEW CHECKLIST

Work Order #: 09100223

A_1	A_2	R	T	M	Q	
☐	☐	☑	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
		☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
		☐	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
		☑	☐	NA	☐	Sample Discrepancy Report (SDR) is completed
☐	☐	☑	☐	☐	☐	Corrective Action issued - #
☐	☐	☐	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* **CIRCLE (YES / NO)**

☐	☐	☑	☐	☑	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☐	☐	☑	☐	☑	☐	Hold time is met for all samples
		☑	☐	NA	☐	Appropriate data qualifier flags are applied
		☑	☐	☐	☐	Manual integrations for samples and QC are properly documented
☐	☐	☑	☐		☐	Samples analyzed within the project or method specific clock
		☑	☐			Retention times have been verified
☐	☐	☑	☐		☐	Appropriate ICAL(s) included
		☐	☐	☑	☐	At least one result per sample is verified against the target quant sheets/raw data
☐	☐	☑	☐		☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☐	☐	☑	☐			Correct amount of sample analyzed (i.e. sample not over-diluted)
		☑	☐			Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
		NA	☐			TICs resemble reference spectra
		NA	☐			TICs between duplicate samples are consistent
☐	☐	☑	☐	☑	☐	Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)
☐	☐	☑	☐			Data for multiple analyses of sample(s) has been evaluated for comparability of results
		☑		☑		Special units for all samples in the final report are correctly calculated
		☑	☐	☑		Manually entered results checked (i.e. TPH/NMOC)
☐	☐	☑				Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)
		☑				Chain of Custody scanned correctly
					☐	Verify sample id's vs. chain of custody
		☑				Date MDL(s) performed per instrument(s) 9/21/09
☐	☐	NA				Samples pressurized w/ appropriate gas (N_2 or He) ☐ Other (i.e. Tedlar bag, cartridge, sorbent)
☐	☐	NA				Final pressure consistent with canister size (6L vs. 1L)
☐	☐	NA				Verify receipt pressures
☐	☐	NA				Verify canister ID #'s
		☐		☑		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
				☑		MDL date(s) present for all instruments utilized
		☐	☐	NA	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: *(to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)*

A/R:

M/Q:

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1:	R:	DR 10/20/09	
A_2:	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Rev. 12/2007

Note (2): Management reviewer and reporting reviewer must be separate individuals.